OIPE JC13
FEB 15 2005
PATENT & TRADEMARK OFFICE

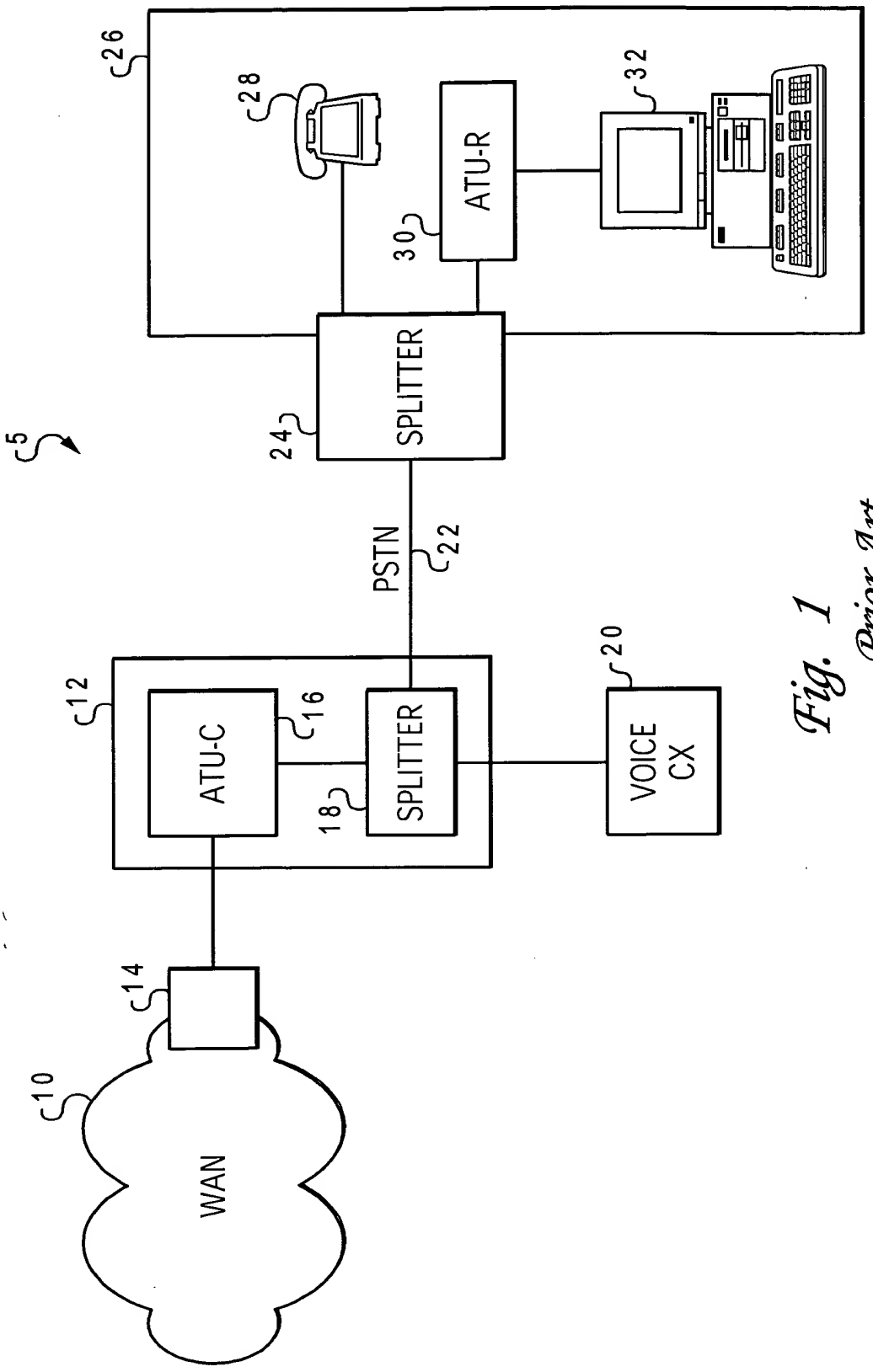

Fig. 1
Prior Art

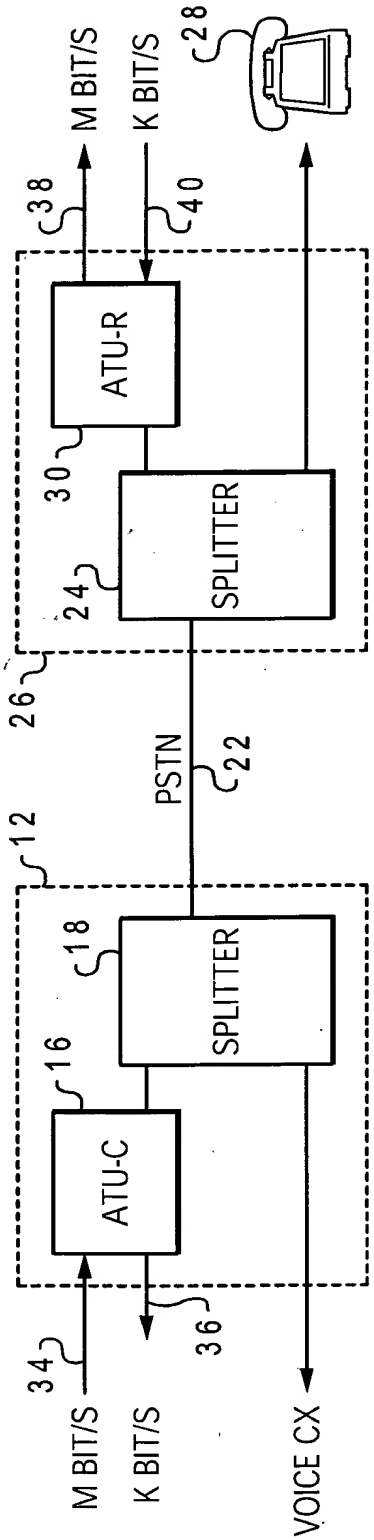

Fig. 2A
Prior Art

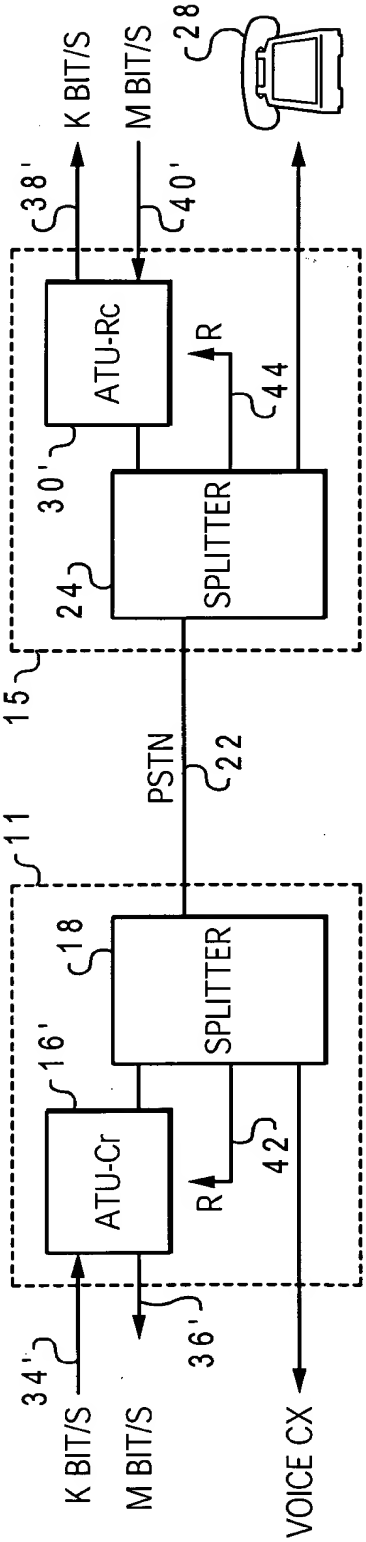

Fig. 2B

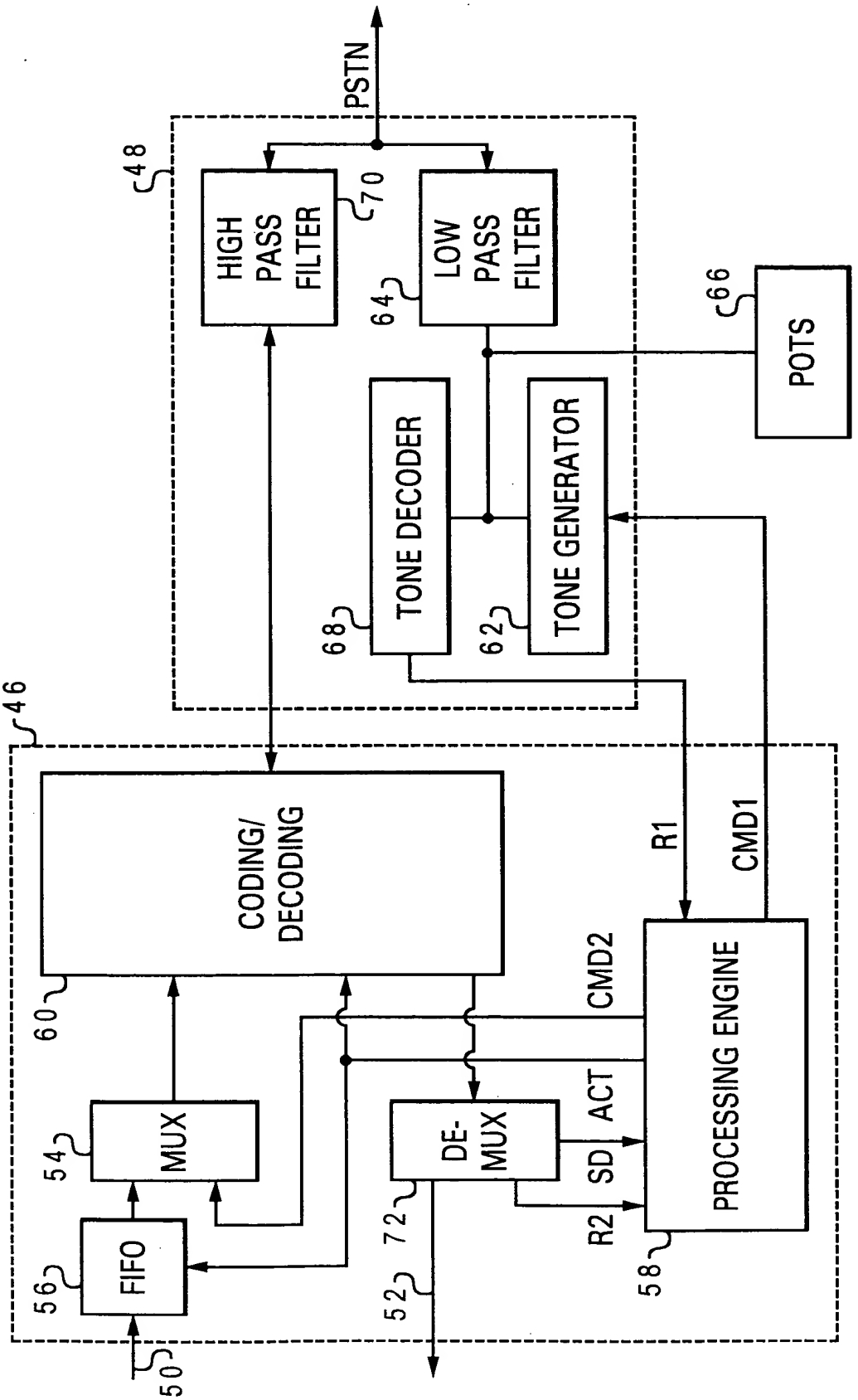
PSTN
48
HIGH PASS FILTER
70
LOW PASS FILTER
64
66
POTS
TONE DECODER
68
TONE GENERATOR
62
46
CODING/ DECODING
60
R1
CMD1
CMD2
PROCESSING ENGINE
ACT
SD
R2
58
MUX
54
DE- MUX
72
FIFO
56
52
50

Fig. 3

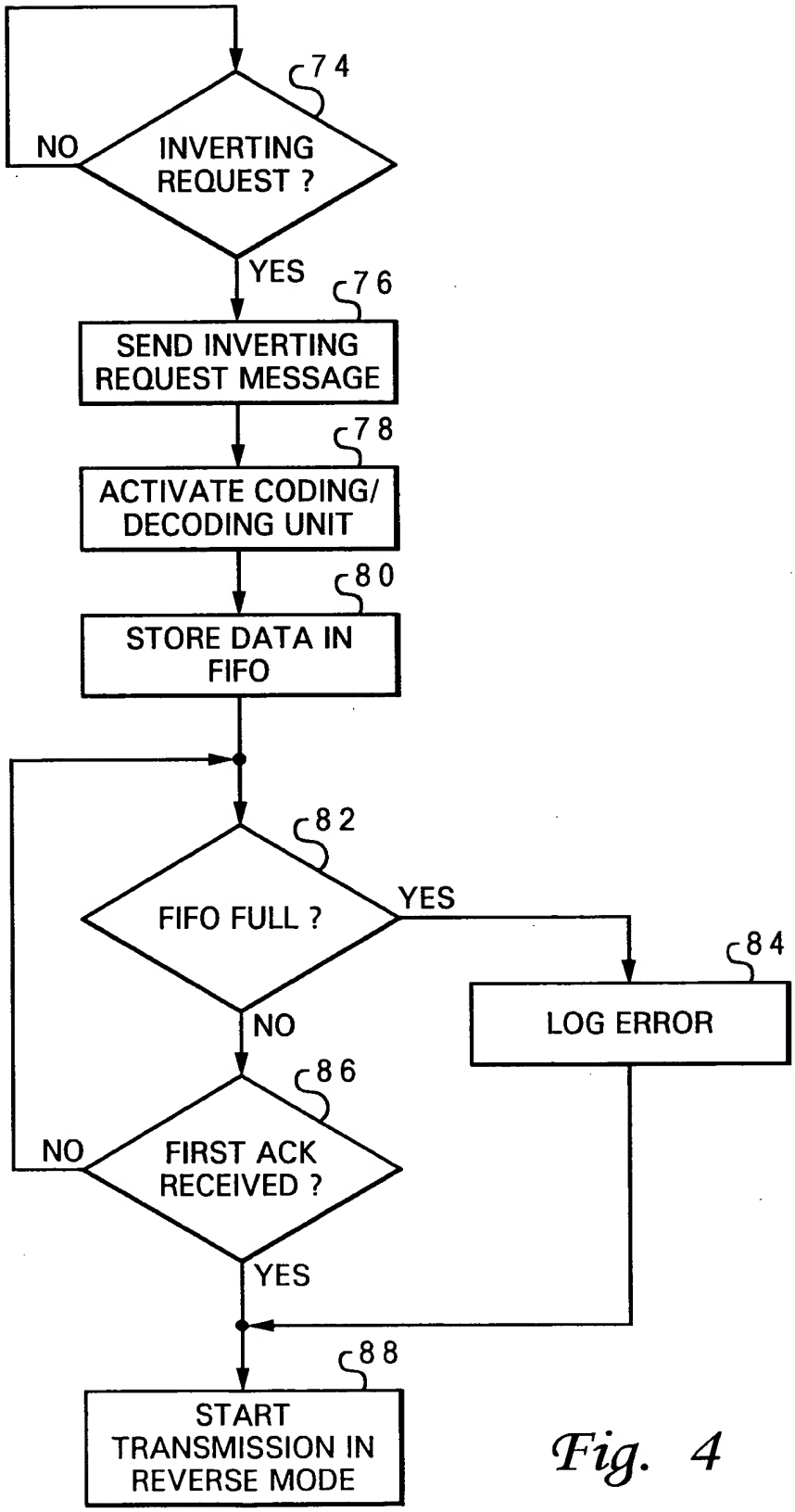
74
NO
INVERTING REQUEST ?
YES
76
SEND INVERTING REQUEST MESSAGE
78
ACTIVATE CODING/ DECODING UNIT
80
STORE DATA IN FIFO
82
FIFO FULL ?
YES
84
LOG ERROR
NO
86
NO
FIRST ACK RECEIVED ?
YES
88
START TRANSMISSION IN REVERSE MODE

Fig. 4

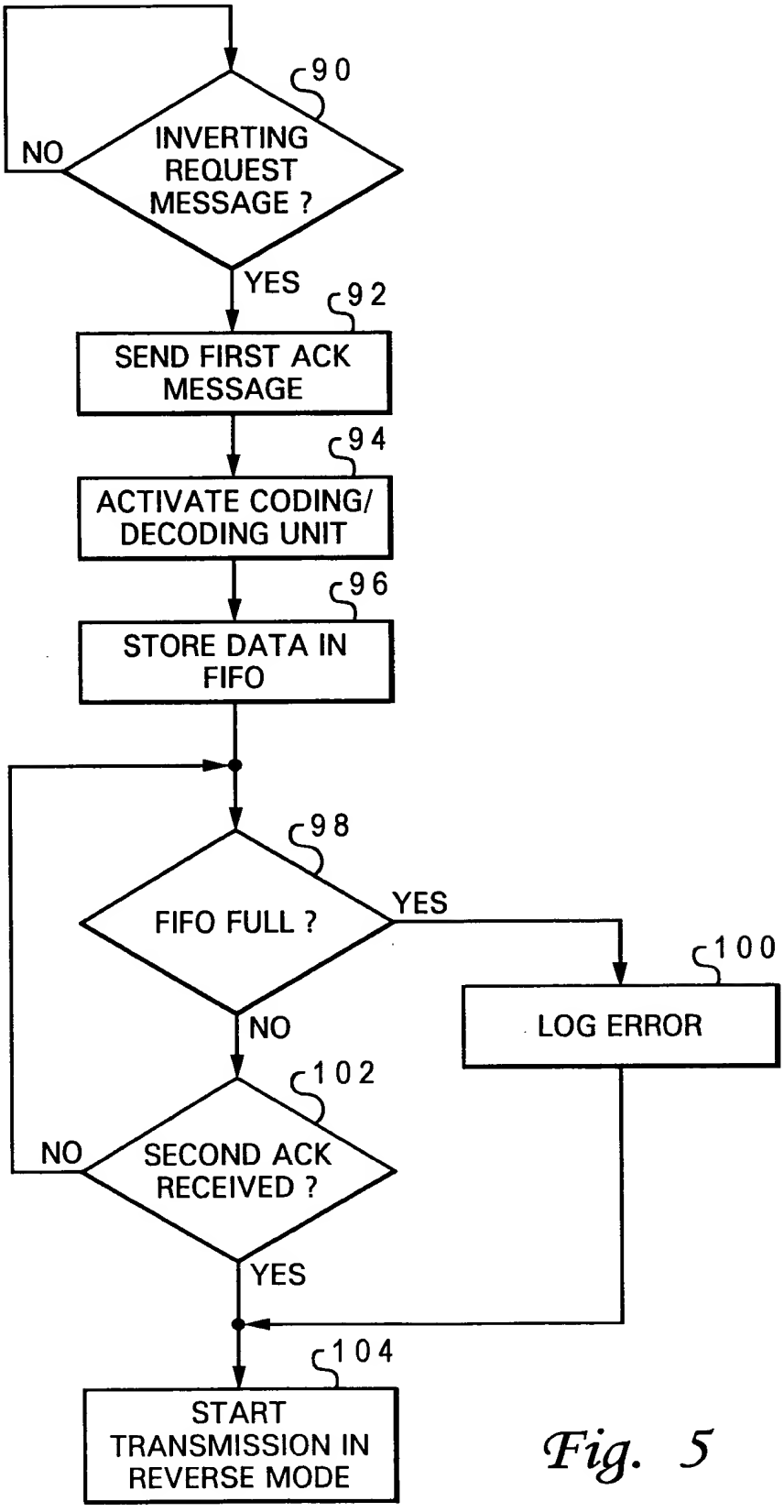
90
INVERTING REQUEST MESSAGE ?
NO
YES
92
SEND FIRST ACK MESSAGE
94
ACTIVATE CODING/ DECODING UNIT
96
STORE DATA IN FIFO
98
FIFO FULL ?
YES
100
LOG ERROR
NO
102
SECOND ACK RECEIVED ?
NO
YES
104
START TRANSMISSION IN REVERSE MODE

Fig. 5